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FORMS, SOURCES AND PROCESSES OF TRUST

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FORMS, SOURCES AND PROCESSES OF TRUST

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Abstract

This chapter reviews some key points in the analysis of trust, based on Nooteboom (2002)ⁱ. The following questions are addressed. What can we have trust in? What is the relation between trust and control? What are the sources of trust? And what are its limits? By what process is trust built up and broken down? What are the psychological mechanisms involved? The chapter ends with an illustration of trust in the police.

JEL code: D01, D23, D64, L14, M14, Z13

Key words: Trust, social psychology, mental framing, relational signaling

Introduction

Much has been written about trust, particularly outside economics, in sociology and management. In spite of this, much confusion and misunderstanding remains. Trust is full of paradox, as listed in Table 2. The purpose of this chapter is to untangle some of the confusion and to clarify the complexities of trust. Use is made of a book that has this purpose (Nooteboom 2002). This chapter gives a summary and an illustration of some central points, and for further details and elaborations reference is made to the book.

Table 1 about here

One important source of misunderstanding, related to Paradox 1, is the confusion of trust as based on control (on the basis of self-interested behaviour) and trust as going beyond control (going beyond narrow self-interest). Can one speak of trust when one believes someone will conform to expectations or agreements because he is contractually or hierarchically bound to do so, or because it is in his interest to do so, or only if he does so even though he has both the opportunity and the incentive not to do so? Or, in other words, can trustworthiness go beyond self-interest? And if it does, is it then blind and unconditional? To clarify this, Nooteboom (2002) proposed a distinction between a wide notion of reliance, which includes control and incentives, and a narrower, stronger notion of trust, which goes beyond self-interest. As noted by Williamson (1993), if trust does not go beyond calculative self-interest, i.e. control, it is not very meaningful. However, while Williamson argued that such trust cannot survive under the pressures of competition in markets, Nooteboom (2002) argued that it can, but that in doing so it does have limits, and these limits do depend on pressures of survival. Trust and control are substitutes, in that with more trust there can be less control, but they are also complements, in that usually trust and contract are combined, since neither can be complete. Trust is needed, since contracts can never be complete, but it can go too far, since trust also can never be complete.

Another source of confusion, related to Paradox 2, is that some see trust as a (trusting) action, and then one can speak of people deciding to trust, while others see trust as a mental state, which one has or has not, and cannot decide to have. This can easily be resolved right away: trust is a state of mind, not an action, but it can lead to trusting action. One may decide to rely on someone, even when not having trust in him.

A third source of confusion concerns what aspect of behaviour one can have trust in, related to Paradox 3. One can trust the competence of people to conform to expectations, and their intentions to do so, to the best of their competence.

These confusions tend to invalidate much empirical research on trust, in which these distinctions and possible confusions were not taken into account. If, in a survey, one asks all-encompassing questions whether people trust others, it is left to the respondent to decide whether he interprets trust as a state of mind or an action, as being based on control or sources of trustworthiness that go beyond control, and as being directed at competence or at intentions. Since different people will make different interpretations, depending on their experience, the context and the framing of the question, the results will often be quite meaningless. More will be said about this later, with the police as an example.

A fourth source of confusion, related to Paradoxes 5 and 6, is that there are rational reasons for trust as well as emotional causes of it. Both occur, and the question then is how they are related. Considerable attention will be paid, in this chapter, to the psychological mechanisms of trust. Rational trust is based on information on someone, from which one infers his trustworthiness, but such information can hardly be complete, and one can hardly be sure about trustworthiness. The person to be trusted (the trustee) probably does not even know himself when he may succumb to temptations or pressures of survival. Trust or mistrust are also governed by psychological tendencies, feelings and emotions, such as naivety, fear, over-confidence, impulsiveness, enamourment, etc. Due to the open-endedness and incalculability of potential future behaviour, it is of dubious validity to model trust as a (calculable) probability (Paradox 6).

There is often a bias to have too rosy a picture of trust, as being always good, and as going together with absence of conflict (Paradoxes 7 and 8). One may trust mistakenly and be open to great vulnerability. Trust may be so strong as to limit the flexibility and variety of economic relations that may be needed for learning and innovation. Precisely because there is trust people may venture into intense conflict, and when that is resolved, trust is likely to deepen (Six 2004).

Finally, trust is not static. While it is needed as the basis for a relationship, it is also shaped by it (Paradox 9). Hence, it should be seen as a process.

To clarify and elaborate on all this, this chapter will review the objects of trust, i.e. things one can trust or rely on, sources of reliability and trust, resulting definitions of reliability and trust, the value of trust, its psychological mechanisms, its relation to contract, and its limits. As noted, all this is derived from Nooteboom (2002), which is referred to for further details. The chapter ends with an application to the police, to give an illustration of how the different dimensions of trust come together in a specific case.

Objects of trust

Trust entails the acceptance of risk that arises from dependence, combined with lack of control. One can trust material objects (e.g. will the car start in the morning), empirical regularities or laws of nature (e.g. law of gravity), people, authorities, organizations, institutions (e.g. laws), and higher powers (god). When the object of trust (what one trusts) is imposed, inevitable, beyond choice, as in the case of laws of nature, higher powers and many institutions (e.g. laws), one may speak of confidence rather than trust (Luhmann 1988). If one

had trust in a judge, rather than confidence, this would suggest that one avoid judgement or select one's own judge.

Trust in people or organizations is called 'behavioural trust'. Behavioural trust has a variety of aspects: trust in competence (competence trust), intentions (intentional trust), honesty or truthfulness, resource availability, and robustness, i.e. limited sensitivity to outside disturbances. Competence trust refers to technical, cognitive, and communicative competencies. On the firm level it includes technological, innovative, commercial, organizational and managerial competence. Intentional trust refers to the intentions of a partner towards the relationship, particularly the presence of opportunism. Opportunism can have a passive/weak and an active/strong form. The passive or weak form entails lack of dedication or effort to perform to the best of competence. Dedication entails active participation, attention, and abstention from free riding. The active or strong form of opportunism entails 'interest seeking with guile', in the words of Williamson (1975), with lying, stealing, and cheating to expropriate advantage from a partner. Absence of such strong opportunism is called 'benevolence' or 'goodwill'. Thus, intentional trust has two dimensions: trust in dedication and trust in benevolence.

In fact, the aspects of trust can be extended further. A systematic way of doing this is to ask and answer the question what kinds of things can go wrong in a relationship. Nooteboom (2002) did this on the basis of a multiple causality of action, derived from Aristotle.

Like people, organizations can be the object of trust, in both their competence and their intentions. We can trust an organization to behave responsibly, regarding its stakeholders and the environment. Of course an organization itself does not have an intention, but it has interests and can try to regulate the intentions of its workers to serve those interests. One's trust in an individual may be based on one's trust in the organization he belongs to, e.g. because the organization has an interest in maintaining its reputation or brand name. Trust in an organization can be based on trust in the people in it. It can be affected by corporate communication, which aims to project a certain image. Trust in people and in organization are connected by the functions and positions people have and the roles they play in their organizations (Ring and van de Ven 1994). For personal trust to be transferred to the organization, trustworthy individuals must be backed up by their authority, position, bosses and personnel. Vice versa, for organizational trust to be transferred to individuals, the people involved should implement organizational interests and rules of trustworthy conduct.

Trust and control

Here, the focus is on intentional trust. In much literature, the explicit or implicit definition of intentional trust is a broad one: the trustor (A) trusts the trustee (B) if A accepts relational risk, i.e. vulnerability to (active or passive) opportunistic actions of B, but expects that B will not in fact engage in such behaviour. In such a broad interpretation of the notion of trust, it would include 'control', defined as any instrument or condition that may mitigate relational risk. Control is often interpreted more narrowly as 'deterrence' (Shapiro et al. 1992, Maguire et al. 2001): in case of opportunistic behaviour the partner would incur a penalty or a material loss. From Nooteboom (1996, 2002) the idea is adopted that there are three ways in which opportunism can be mitigated:

1. opportunity control: limitation of opportunities for opportunism, by restricting the range of a partner's actions, by contract or hierarchical supervision
2. incentive control: limitation of material incentives to utilise opportunities for opportunism, due to dependence on the relationship, hostages or reputation effects
3. benevolence or goodwill: limitation of inclinations towards opportunism, on the basis of social norms or personal relations

Deterrence would include opportunity control and incentive control. Benevolence or goodwill goes beyond deterrence, with more intrinsic motives to limit opportunism.

Sources of reliability

Trust has rational reasons, based on inference of trustworthiness, and psychological causes, which block, affect or enable rational evaluation. For rational trust, based on inference of trustworthiness, we need to know what the sources of trustworthiness are. I adopt, with some modifications, a scheme from Nooteboom (2002), which was in turn adopted, with modifications, from Williams (1998), specified in Table 2.

Table 2 about here

Following Williams (1988), Table 1 distinguishes between ‘macro’ sources, which apply generally and impersonally, apart from any specific exchange relation, and ‘micro’ sources. The first arise from the institutional environment of laws, norms, values, standards, and agencies for their enforcement. They yields ‘institution-based trust’. They are also called sources of ‘thin’ trust. This kind of trust requires that we trust those institutions to support or enforce trustworthiness of people and organizations. The ‘micro’ sources arise in specific relations, and are therefore personalised. They are also called sources of ‘thick’ trust. The distinction between macro and micro sources is also known as the distinction between ‘universalistic’ or ‘generalised’ sources versus ‘particularistic’ sources, made by Deutsch (1973: 55), and between impersonal, institutional, and personalised sources made by Shapiro (1987) (see also Bachmann 2000). This distinction goes back to the work of Parsons. Social norms and moral obligations, including a sense of duty, following Parsons and Durkheim, were proposed more recently by Bradach and Eccles (1984), Zucker (1986), and Dore (1983), among others. Fukuyama (1995) employed the term of ‘spontaneous sociability’.

Williams further distinguished self-interested and altruistic or ‘other-directed’ sources of co-operation. The self-interested sources are associated with the notions of deterrence and ‘calculus-based trust’ (e.g. Lewicki and Bunker 1996). In my reconstruction, taken from Nooteboom (2002), this includes opportunity control and incentive control. Limitation of opportunities has an ‘outside form’, to control outside partners, in contract enforcement. It also has an ‘inside form’, within an organization, in the exercise of ‘hierarchy’, with managerial ‘fiat’ under an employment relationship. Both entail monitoring of behaviour, to detect cheating as a cause for sanctions. The distinction between external contracts and internal hierarchy lies at the basis of the reasoning of transaction cost economics (TCE). In view of uncertainty and the consequent impossibility of complete contingent contracts, and the fact that with external contracting sanctions ultimately can only be imposed through the external authority of the law, internal control by hierarchy yields more opportunities to demand information for monitoring and to impose sanctions, under the general conditions of an employment relation.

In incentive control, partner B behaves well towards A because he is dependent on A for one or more of the following reasons: A has a unique, difficult to replace value to B, B faces switching costs as a result of relation-specific investments, partner A holds a hostage from B, or B has to protect his reputation. The notion of specific investments is derived from TCE, except that I consider the relation rather than the transaction as the unit of analysis, and hence speak of relation-specific, not transaction-specific investments. I extend the notion of specific investments to include investments in relation-specific mutual understanding and in the

building of relation-specific trust. The notion of hostage is also taken from TCE. It mostly takes the form of sensitive information that is of value to B, and is held by A, who can destroy, divulge or transfer it to a competitor of B, if B does not behave well. A hostage can also take the form of a minority share that A has in B, with the (typically implicit) threat of selling the shares to a firm that aims to take over B. It may also take the form of specialised staff of B, temporarily stationed at A, who could be poached by Aⁱⁱ. Calculation of self-interest includes reputation (Weigelt and Camerer 1988) and the assessment of future benefits of present cooperativeness ('shadow of the future'), as has been recognised by many (Telser 1980, Axelrod 1984, Hill 1990, Heide and Meiner 1992, Parkhe 1993). A reputation mechanism requires reporting and broadcasting of non-trustworthy behaviour. To forestall mere gossip, this often requires some agency to make reliable reports or to check their validity. This can be a trade, industry or professional association.

The 'altruistic' or 'other-directed' sources go beyond self-interested behaviour. Man is not only self-interested and opportunistic: in business also common honesty and decency are found (Macaulay 1963). This can yield voluntary compliance to an agreement that goes beyond self-interest (Bradach and Eccles 1989). This may be based on established, socially inculcated norms and values (macro), and empathy, identification, affect and routines developed in specific relations (micro). The first includes pressures of allegiance to groups one belongs to, or values and norms inculcated by socialization into those groups. On the micro side, empathy-based trust entails that one knows and understands how partners think and feel. It allows one to assess strengths and weaknesses in competence and intentions, to determine the limits of trustworthiness under different conditions (Nooteboom 2002). Identification-based trust goes further: it entails that people think and feel in the same way, sharing views of the world and norms of behaviour. This may lead to affect- and friendship-based trust.

Routine-based trust, proposed by Nooteboom (2002), entails that when a relation has been satisfactory for a while, awareness of opportunities of opportunism, for oneself and for the partner, is relegated to 'subsidiary awareness' (Michael Polanyi). One takes the relation for granted and does not continuously think about opportunities to gain extra advantage. As relations develop in time partners begin to understand each other better (empathy), and may then develop identification-based trust (McAllister 1995, Lewicki and Bunker 1996), and routine-based trust. This constitutes a relation-specific 'trust process'. Identification may go so far that one is not able or willing to consider the possibility of untrustworthiness. This may include cognitive dissonance: one does not want to face evidence of untrustworthiness because it conflicts with deep-seated convictions or feelings. Routine-based and identification-based trust can become excessive, causing rigidity of relations and blocking innovation.

The trust literature employs the notion of 'knowledge based trust', which is also proposed as a stage in trust building (McAllister 1995, Lewicki and Bunker 1996). I find this a vague and confusing notion (Nooteboom 2002). Opportunity control (contracts), incentive control (dependence, hostages, reputation) and empathy are all based on knowledge of, respectively, the terms of a contract, the law and possible sanctions, uniqueness of partner value, hostage keeping, reputation, of how a partner thinks.

Definition of trust

The question now is whether we should adopt the wide definition of trust, indicated before, which would include deterrence (opportunity and incentive control) as sources of trust. Like Williams, many other authors have claimed that trust can go beyond deterrence, on the basis of 'goodwill' or 'benevolence', resulting from loyalty or altruism (Das and Teng 1998, Maguire et al. 2001, Lane and Bachmann 2000). Deterrence is felt to be foreign to the notion

of trust: 'genuine' trust is based on other, more social and personal foundations of trustworthiness. Maguire et. al. (2001: 286) claimed that if we do not include the latter, we conflate trust and power. As Williamson (1993) indicated, trust has no meaning if it does not go beyond calculative self-interest.

For these reasons, trust has been defined more narrowly as the expectation that a partner will not engage in opportunistic behaviour, *even in the face of opportunities and incentives for opportunism* (Bradach and Eccles 1984, Chiles and McMackin 1996, Nooteboom 1996). This narrower definition is felt to indicate better what most people would call 'real trust'. As suggested by Nooteboom (2002), this problem of definition has been and still is a source of major confusion and misunderstanding. Perhaps we should use different terms for the different notions: 'reliance' for the wide notion, including deterrence, and 'real trust' or 'trust in the strong sense' for trust that goes beyond deterrence, in benevolence.

The value of trust

Trust can have extrinsic value, as a basis for achieving social or economic goals. It can also have intrinsic value, as a dimension of relations that is valued for itself, as part of a broader notion of well-being or the quality of life. Many authors have pointed this out. People may prefer, as an end in itself, to deal with each other on the basis of trust. Most economists tend to think of value in exchange as something that exists independently from the transaction. As formulated by Murakami & Rohlen (1992: 70): 'The value of the relationship itself is typically ignored and the impersonality of the transaction is assumed'. In intrinsic utility, the exchange process itself matters, as does the economic surplus that the exchange yields.

When intrinsic, the value of trust can be hedonic or based on self-respect. Many people would prefer to have trust-based relations rather than relations based on suspicion and opportunism for hedonic reasons. For most people it is more agreeable or pleasurable to have friendly relations than to have to deal with animosity and suspicion. There is also an intrinsic motive of self-respect, based on adherence to internalised norms or values of decent or ethical conduct. There is also a more socially oriented motive, in the will to be recognised, valued and respected by others. Social recognition may be served by accumulating riches, power or glamour, but also by being trustworthy and trusting, and thereby demonstrating adherence to established values, norms or habits of behaviour. This may merge with the earlier motive of self-respect, while analytically it can still be distinguished. Fukuyama (1995: 358) traced the urge for recognition to Hegel: a struggle for recognition, 'that is, the desire of all human beings to have their essence as free, moral beings recognised by other beings'. As indicated, this does not necessarily lead to trustworthiness and trust. Philosophers have also postulated other urges, such as the will to power. The extrinsic, economic value of trust lies in the fact that it enables interaction between people and between organizations and can reduce transaction costs. The downside of trust is that it entails risk and can be betrayed, which may endanger the survival of a person or firm. There can also be too much solidarity, providing an obstacle to change and innovation.

The distinction between extrinsic and intrinsic value is analytical. They are not necessarily perceived as distinct. An important question is how they are related in the perception and behaviour of agents. Extrinsic value is instrumental, which entails calculation, and suggests a focus on self-interest, while intrinsic value can be non-rational, unreflective and other-directed. The question concerning their relation is related to questions whether and how calculative and non-calculative trust can be combined, and whether trustworthiness can go beyond self-interest.

Psychological sources

Trust entails acceptance of relational risk. This may be based on a rational evaluation of trustworthiness. However, such evaluation is mediated by decision heuristics, and next to rational evaluation trust is also based on instinct, inclinations, feelings and emotions. Evolutionary psychology suggests that a tendency towards 'give and take' (reciprocity), and accepting relational risk, is 'in our genes', since it was conducive to survival in the ancient hunter-gatherer societies in which humanity evolved. The variance of yields, in gathering edible plants, roots, nuts, etc., and the even greater variance in hunting, together with problems of durable storage, entails an evolutionary advantage of the willingness to surrender part of one's yield to others in need, in the expectation to receive from them when they are successful (Cosmides and Tooby 1992: 212). This would solve the problem, often noted in the literature, how in a sequential game of give and take the first move of giving, and thereby making a risky pre-commitment, is made (Simmel 1978, Luhmann 1979). The evolutionary argument suggests that we do this instinctively. However, psychological mechanisms that were conducive to survival in evolution do entail biases that can lead to serious error (Bazerman 1998).

Here we should no longer talk of reasons but of causes of trust. However, the distinction I am making here may suggest a greater cleavage between rationality and emotion than is valid. Like many others, I believe that rationality and emotions are intertwined (Polanyi 1962, Merleau-Ponty 1964, Damasio 1995, Hendriks-Jansen 1996, Lakoff and Johnson 1999). I include in cognition not only perception and interpretation but also evaluation, i.e. value judgements. Not only value judgements but also interpretations and even perceptions are emotion-laden. In the interpretive or hermeneutic view, our knowledge is constructed in mental categories, which include psychological mechanisms that may yield serious distortion.

Nevertheless, we can distinguish more or less rational inference of trustworthiness from less reflective causes of trust, based on affect of friendship or kinship, or on routinised behaviour. I follow Herbert Simon (1983) in recognizing the role of emotions in reason, to shift routinised behaviour from subsidiary to focal awareness. Emotions are rational in triggering reflexes or attention when survival requires it. However, they can yield error. They may lead us to jump to erroneous conclusions, and may produce prejudice. Evidence of untrustworthiness may be ignored as a result of cognitive dissonance. As Deutsch (1973: 159) put it:

A person's perceptions of another will be determined not only by the information he receives from his direct experiences or from what others tell him, but also by his need to absorb this information in such a way as to prevent disruption of existing perceptions, cognitions, or evaluations to which he is strongly committed.

Decision heuristics

Social psychology offers a number of insights into the decision heuristics that people use. In a survey, Bazerman (1998) mentions the following heuristics:

- Availability heuristic: people assess the probability and likely causes of an event by the degree to which instances of it are 'readily available' in memory, i.e. are vivid, laden with emotion, recent and recognizable. Less available events and causes are neglected.
- Representativeness heuristic: the likelihood of an event is assessed by its similarity to stereotypes of similar occurrences. We recognise something according to the likeness of some focal features to those of a prototype, which may be a stereotype, and on the basis of that attribute other features from the stereotype that are not in fact present. This can easily yield prejudice.
- Anchoring and adjustment. Judgement is based on some initial or base value ('anchor') from previous experience or social comparison, plus incremental adjustment from that value. People

have been shown to stay close even to random anchors that bear no systematic relation to the issue at hand. First impressions can influence the development of a relation for a long time. One cannot maintain that these heuristics are irrational. In view of uncertainty and bounded rationality they may well be adaptive, i.e. contribute to survival. Concerning the availability heuristic, note the importance of an emotion-laden perception of a suspicious event to trigger awareness of the routine and subject it to scrutiny, in focal awareness. Perhaps this is connected with the availability heuristic: we pay attention only when triggers are emotion laden. If we did not apply such filters our consciousness would likely be overloaded.

The representativeness heuristic is related to the role of prototypes in language and categorization. Since definitions can seldom offer necessary and sufficient conditions for categorization, and meaning is context-dependent and open-ended, allowing for variation and change, we need prototypes (Rosch 1978). A prototype represents an exemplar of a class that connects others in the class. Class membership is decided on the basis of resemblance to a salient case, or a typical case, which serves as a prototype. A prototype may turn into a shallow stereotype. However, the mechanism of attributing unobserved characteristics upon recognition of observed ones enables pattern recognition that is conducive to survival.

Concerning anchoring and adjustment, under uncertainty cognition does need such an anchor, and taking the most recent value of a variable, or a value observed in behaviour of people in similar conditions, with whom one can empathize, may well be rational. Trust can be seen as a default, in the sense that on the basis of past experience we assume trustworthiness unless we find new evidence that contradicts it. We adapt past guidelines for behaviour on the basis of new evidence. Incremental adjustment can be inadequate, but so can fast adjustment. Studies of learning and adjustment have shown that hasty and large departures from existing practices can yield chaotic behaviour (March 1991, Lounamaa and March 1987). Thus anchoring and adaptation may also be a useful and justified heuristic, in view of uncertainty. Nevertheless, these heuristics can yield errors.

The relevance of these heuristics to trust is clear, because they affect, or enable, expectation and attribution of trustworthiness. According to the heuristics, one would develop expectations, explain broken expectations, and attribute trustworthiness according to what is 'available' in the mind, stereotypes, existing norms or recent experience.

Another psychological phenomenon is that people are found to have difficulty to choose between immediate gratification and long-term benefit, yielding a problem of 'the weakness of the will'. This has been explained in terms of people having multiple selves that are at odds with each other, or as a visceral drive competing with a rational inclination. Another interpretation follows the availability heuristic: immediate gratification is more 'available'. Studies of behaviour under uncertainty have shown that people may assess delay in gratification differently when it is near than when it is far ahead, and that sometimes discounting seems to take place not according to an exponential but according to a hyperbolic function. According to that function, the negative utility of a delay of gratification increases as the decision moves to the present. As a result, preferences may reverse at some point in time. The relevance of this phenomenon to collaborative relations is also clear, in the trade-off between loyalty to a partner, which may be in one's long-term interest, and the temptation to defect to another partner who offers more advantage in the short term. One may honestly think one is able to withstand that temptation in the future, and succumb to it when it nears. Again, we cannot unequivocally judge that this psychological mechanism is maladaptive. As noted also by Bazerman (1998), the impulse of temptation may also entail the vision of entrepreneurial opportunity, and too much repression of it may suppress innovation.

Framing

‘Prospect theory’ (Kahneman et. al.) has demonstrated that people are not risk-neutral, but can be risk-taking when a decision is framed in terms of loss, and risk-averse when it is framed in terms of gain. Framing entails, among other things, that in a relation people will accept a greater risk of conflict when they stand to incur a loss than when they stand to obtain a benefit. Related to this effect is the ‘endowment effect’: people often demand more money to sell what they have than they would be prepared to pay to get it. In the first case one wants to cover for loss. This may contribute to loyalty and stable relations, as follows. Relations typically end when one of the partners encounters a more attractive alternative, while the other partner wants to continue the relation. The first partner is confronted with a gain frame, the second with a loss frame. This may cause the second partner to engage in more aggressive, risky behaviour, to maintain the relation, than the first partner, who may be more willing to forego his profit and run less risk of a harmful separation procedure. One wonders what the adaptive rationale of this difference between a gain- and a loss-frame is, if any. Perhaps it lies precisely in the effect just mentioned: it reduces defection and thereby stabilises relationships, which may have contributed to survival.ⁱⁱⁱ However, this is only conjecture on my part.

Earlier, I noted the importance for trust of empathy and identification, yielding the ability to dwell in (empathy) or share (identification) others’ categories of understanding and motivations, as a function of conditions. Recall the definition of trust, above, as a four-place predicate: one trusts someone in some respect under certain conditions. It is part of trust, then, to understand another’s cognition and motivation, as a function of conditions, in knowledge-based trust, to sympathize with them in empathy-based trust, or identify with them in identification-based trust. This is clearly related to the availability heuristic: ‘availability’ increases to the extent that one can understand behaviour, and sympathize or identify with it, or, on the contrary, abhor it. This affects both one’s own trustworthiness, in the willingness to make sacrifices for others, and one’s trust, in the tolerance of behaviour that deviates from expectations. One will more easily help someone when one can identify with his need. One can more easily forgive someone’s breach of trust or reliance when one can sympathize or identify with the lack of competence or the motive that caused it. One can more easily accept the blame for oneself. One may sympathize with his action, seeing perhaps that his action was in fact a just response to one’s own previous actions. Empathy and identification are both forms of affect-based trust, but in the latter affect is the strongest.

Another reason to attribute blame to oneself when someone else is in fact to blame, is to reduce uncertainty or establish a sense of control. This works as follows. If it is perceived to be impossible or very difficult to influence someone’s behaviour in order to prevent or redress damage from broken expectations, one may attribute blame to oneself. By doing that, one relieves the stress of feeling subjected to the power of others. For people with little self-confidence or a low self-image, this is a move of desperation, and self-blame fits with the preconception one had of oneself. For people with self-confidence, self-blame may yield a sense of control: if the cause lies with oneself, one can more easily deal with it. Of course, that may be an illusion, due to overconfidence in oneself.

Another mechanism is that of a belief in a just world, which gives reassurance. By enacting justice, even anonymously, one confirms its existence by contributing to it, and thereby maintains a sense of security. However, when the sacrifice for another would be too high to accept, in the view of self-interest, then to avoid a self-perception of callousness one may convince oneself that his hardship is his own fault.

Yet another psychological mechanism is that in violation of rational behaviour sunk costs, such as sacrifices made in a relationship, are not seen as by-gones that should be ignored in an assessment of future costs and benefits. They are seen as sacrifices that would be seen as in vain if one pulls out after having incurred them. This yields what is known as ‘non-rational escalation of commitment’. It is associated with cognitive dissonance: cutting one’s losses and

pulling out would entail an admission of failure, of having made a bad decision in the past. The phenomenon is confirmed in empirical research, which shows that when the decision to cut one's losses needs to be made by someone not involved in the initial decision, or when the threat of an admission of failure is removed, the rational decision to pull out is made. Again, one cannot say that this mechanism is always bad, because it also demonstrates perseverance in the face of setbacks, which can be a good thing, and is in fact a trait of many a successful innovating entrepreneur. This phenomenon can also be connected with the effect of a loss frame versus a gain frame, proposed in prospect theory. The person, or group, that made the initial decision experiences a loss frame, with the inclination to accept further risk in order to prevent acceptance of the loss. The decision maker who enters fresh experiences a gain frame, to make a decision that will offer profit in the future, regardless of past sunk costs, and will be less inclined to accept the high risk of continuing losses from sticking to past decisions. The mechanism of non-rational escalation can contribute to the continuation of a relationship where it is not beneficial.

Trust and contract: substitutes or complements?

How are trust and contract related? Are they complements or substitutes? If we interpret trust in the wide sense of reliance, it can be based on the assurance offered by contracts. Contract supports reliance. On the other hand, some social scientists argue that contract can be destructive of trust in the stronger, narrower sense. Unwanted side effects result mainly from the active use of contract in monitoring activities, threat or litigation, in other words deterrence. Such actions are argued to evoke conflict (Gaski 1984, Hunt and Nevin 1974, Lusch 1976), opportunism (Goshal and Moran 1996), and defensive behavior (Zand 1972; Hirschman 1984). As a result more coercion will have to be used (Goshal and Moran 1996), or in the words of Deutsch (1973: 88): 'Without the other's trust as an asset, power is essentially limited to the coercive and ecological (i.e. conditional) types, the types that require and consume most in the way of physical and economic resources'. As a result, they argue that it may not always be desirable to specify and enforce a contract. The negative effects may not only materialise in the present, but also in future relationships. If a case is taken to court, the plaintive could seriously jeopardize a future relationship with that partner. If few alternative partners are available, the opportunity costs of this may be very high. Also, litigation may affect reputation thereby jeopardizing potential future relations with others. Here, contract and trust are substitutes, or 'opposing alternatives' (Knights et al. 2001: 314).

I propose that some of these differences of opinion are only apparent, and are due to different interpretations of the notion of trust. If the argument is that trust in the wide sense of 'reliance' may be based on contract, this can be quite consistent with the argument that detailed contract specification and strict enforcement is in conflict with trust in 'the strong sense', going beyond control.

But even after correction for such misunderstanding, trust and contract can still be seen as both complements and substitutes. If one accepts that due to uncertainty about future contingencies of contract execution contracts cannot be complete, especially in innovation, at some point one has to seek recourse to trust (in some sense). Trust, one might say loosely, begins where contract necessarily ends. Thus, they are complements. On the other hand, intuition tells us that when trust is large, contracts can be limited. Thus they are substitutes.

Klein Woolthuis et al. (2005) conducted an empirical, longitudinal investigation of the relation between trust and contract during the evolution of collaborative projects in innovation, and found evidence for both substitution and complementarity. One finding, in favour of substitution, was in line with the argument of Lewicki and Bunker that first risk is mitigated by contracts, which later, as empathy develops, are replaced by trust. Another

finding, in favour of complementarity, was that contracts may be extensive and complex under high trust for purely practical reasons of coordination in complex projects, or in other words for reasons of competence trust rather than intentional trust. Also, the drafting of a complex contract itself constitutes a relation-specific investment, which one does not want to engage in until sufficient trust has developed to make it likely to be worthwhile.

Limits of trust

Several authors suggest that goodwill does not operate independently from self-interest. Bachmann (in Lane and Bachmann 2000: 303) proposed that trust is a hybrid phenomenon, including both calculation and goodwill. According to Williamson (1993) it is impossible to reliably judge possible limits to other people's opportunism. Williamson claimed that if trust goes beyond calculative self-interest (in 'real trust'), it inevitably yields blind, unconditional trust, which is unwise and will not survive in markets. Pressures of survival under competition force firms to take advantage of others whenever they have the opportunity. In contrast, many social scientists maintain that such trust is viable, without necessarily becoming blind or unconditional, and is indeed pervasive, also in markets (Gambetta 1988, Helper 1990, Murakami and Rohlen 1992, Dyer and Ouchi 1993, Ring and Van de Ven 1994, Gulati 1995, McAllister 1995, Chiles and McMackin 1996, Nooteboom 1996, Nooteboom et al. 1997). While in contrast with Williamson I maintain that trust beyond calculative self-interest can be viable, I agree that blind, unconditional trust is generally unwise, in markets. There are generally limits to trustworthiness and trust. While trust is not always calculative, it is nevertheless constrained by possibilities of opportunism (Pettit 1995). Even the most loyal, committed and dedicated of people may succumb to the temptation of golden opportunities or pressures of survival. Firms may be subject to competitive pressure to such an extent that they cannot afford to accept any sacrifice for the sake of loyalty. Therefore, there are limits within which people and firms may be worthy of real trust (Pettit 1995, Nooteboom 2002). One way to model trustworthiness is in terms of a limited resistance to temptation towards opportunism. This may be modelled as a threshold for defection: one does not opportunistically defect until the advantage one can gain with it exceeds the threshold. This threshold may depend on implicit or explicit norms of conduct, and on competitive pressure. It is likely to adapt as a function of experience (Nooteboom and Gorobets 2004). Trust may then be modelled as based on a perception or assumption of such a constraint on a partner's opportunism.

Trust, being associated with risk of things going wrong, is challenged when things do go wrong, or when 'trouble' arises (Six 2004). This does not necessarily entail a breakdown of trust. The question to be asked is why things went wrong. This could be due to outside accidents beyond anyone's control, a mistake, lack of competence, lack of effort, or opportunism. How does one assess what is the case? What motive and competence will one infer and attribute to the trustee, and what implications for action will one derive? An opportunistic partner would not admit his opportunistic motive, and will claim 'force majeure', if he can get away with that. This yields an argument for openness in trust relations (cf. Zand 1972), and the use of 'voice' (Hirschman 1970, Helper 1990): it may be better to admit a mistake, and timely so, in order to have the best chance of redressing it, than to run the risk of one's action being seen as a sign of opportunism (Nooteboom 2002).

Summing up, trust is a four-place predicate (Nooteboom 2002): A trustor (1) trusts a trustee (2) in some respects (3), under some conditions (4). We generally do not trust different people equally, we may trust a person in some respects, but not in others, and we often trust people in some conditions but not in others. Trust generally has its limits because trustworthiness generally has its limits

An illustration: trust in the police^{iv}

Trust by citizens in the police is of crucial importance for the legitimacy of the police itself, but also for external reasons: without such trust, people may lose trust in society more widely, and may be tempted to take the law into their own hands. Trust in the police is needed to maintain state monopoly of violence. The case of the police illustrates a number of features of trust. First, it illustrates the multi-level nature of trust. Trust in the police requires trust in individual officers as well as in police organization and underlying institutions of law and law enforcement, and these levels of trust should support each other. Mistrust in the police may spill over into mistrust of the social or political system as a whole. Conversely, lack of trust in politicians, or in a minister of justice, or in an interior minister, may spill over into mistrust in the police.

Surveys indicate that in the Netherlands citizens generally trust the police in their intentions but less in their competence. That is far from ideal, but it is much better than the reverse, with a competently corrupt police.

First, let us consider competence trust. That requires, first of all, that it is clear, to citizens and to the police itself, what can be expected of the police, and what the priorities are. What are the priorities of 'catching criminals', traffic control, protection, aid in disaster, and community service? How do people assess competence in each? Police service is partly an experience good, in which quality is assessed during the experience of direct contact, and partly a credence good, where the citizen is incompetent to judge quality even after contact. To the extent that competence cannot be judged, there is displacement from real but unknown factors to observable proxy indicators, such as the crispness of an officer's uniform, his manner and speech, and generally the authoritativeness that the officer exhibits, in calmness and self-confidence. When quality is difficult to judge, one will also seek judgement on the basis of outside information, such as gossip, reports in the media, or communications (e.g. on percentages of crimes solved) from the police itself. Public media may be biased, tending to report more on failures than on successes. Self-reports from the police may be suspect. As noted before, a reputation mechanism may require an independent agency to give trusted information (Shapiro 1987).

Next, let us consider intentional trust. Table 1 can be used as a tool for the analysis and design of its sources. Police officers are constrained in opportunities for opportunism by legal governance and bureaucratic control, but the effectiveness of this is limited by constrained opportunities for monitoring of the policeman's conduct in the field. Monitoring and reporting by colleagues out in the field is limited by an ethic of mutual solidarity, needed for thick trust between officers, for mutual support under hazardous conditions. Incentive control is limited by one-sided dependence of the citizen on the policeman with his monopoly on violence: the citizen has limited opportunity for retaliation. Since one cannot choose to dodge the police, and one has no choice of officer, we may need to speak of confidence rather than trust.

Attempts have been made to establish some countervailing power in the form of complaint procedures, which also enable a reputation mechanism. The force of reputation may be further enhanced by embedding a policeman in a local community, to yield a 'shadow of the future'. Building up understanding and reputation entails relation- or community-specific investments that will only be undertaken when there is a perspective of a more or less durable relationship. Nevertheless, a fundamental asymmetry of dependence remains. Since instruments of both opportunity and incentive control have limited force, sources beyond self-interest are needed as a complement, in 'real' trustworthiness. One is the force of norms of conduct, which should dominate self-interest. This is, of course, what we call integrity. Another is empathy and routinization in relations. In routinization fair conduct has become a habit. Empathy

entails that an officer should view the execution of his task from the perspective of the citizen. While sticking to legal and professional norms, the officer should try to act and explain his actions in forms that fit the intellectual and cultural 'absorptive capacity' of the citizen. Of course, one cannot expect that the citizen concurs with punitive action, but he should at least understand what is happening and what motivates police action. In terms of the social psychological analysis conducted above, the officer should try to link with the citizen's repertoire of categories, and, if possible, to construe his own action as an adjustment with respect to the citizen's cognitive anchors, or to help citizens in the construction of adequate categories. There is an enormous potential here for the police to help prevent misunderstanding and grudges among foreigners and to aid in their integration in society. This is aided by a multi-cultural police force.

When empathy develops into identification it may go too far, with the officer compromising on the rules and norms out of identification with local citizen interests. Then, he may have to be moved elsewhere. Thus, citizen relationships need to be sufficiently durable to encourage investment in understanding and trust, but not so long as to yield excessive identification. In most activities in markets, agents are in a gain frame: they stand to profit from market exchange. A significant feature of police work is that citizens typically find themselves in a loss frame: the criminal stands to lose his freedom and opportunity of criminal gain, and citizens are mostly encountered when they stand to lose personal safety or property. Hence, the force of emotions, in the availability heuristic, is high. Threats of safety or property are likely to evoke mental frames of strong self-preservation, in flight, fight, revenge, panic, and the like. The police officer should help to defuse the emotions involved. Emotions under the threat of loss detract from the reliability of citizen reports and complaints, reducing their worth as a means of governance (see above). All the more important it is, in such emotion-laden conditions, for the officer to keep his cool, confidence, authority, fairness and empathy. In sum, sources of reliability of the police are limited: hierarchical control is limited due to limits of monitoring, a highly one-sided dependence of citizens, limited opportunities for trust based on ongoing personal relations and routinised behaviour, while emotions and suspicions may run high due to citizens typically being in a loss frame. Thus, reliability has to be based on legal control, procedures of accountability, press scrutiny to support a reputation mechanism, and, perhaps most important of all, integrity.

Conclusion

The notion of trust is filled with confusion and misunderstanding. One has to carefully distinguish between levels of trust: personal, organizational and institutional. Ideally, different levels of trust are mutually supporting: trust in people should be consistent with trust in the organization where they work, and should be supported by surrounding institutions. One has to distinguish between trust in different aspects of behaviour, particularly between trust in competence and trust in intentions. Concerning intentional trust, one needs to distinguish between a wide notion of trust, here called reliance, which includes control, of opportunities and incentives towards opportunism, and a stronger, narrower notion of 'real' trust that goes beyond calculative self-interest, on the basis of norms of conduct (integrity), or personal bonds of empathy or identification, or routinised conduct.

In view of this complicatedness of trust, survey questions asking people whether they 'generally' trust others, without specification or qualification, are so unreliable as to be useless and misleading. When answering the question, people may have in mind: trust in institutions, organizations or individuals; competence trust or (at least two kinds of) intentional trust; trust based on control or trust beyond self-interest; and trust under different kinds of circumstances. When asked about 'general' trust in the police, for example, people

may trust the competence of individual officers, but distrust the competence of police bureaucracy. They may trust the intentions of the law, and the benevolence of most officers, but not their dedication. When asked about their general trust in the police, on which of these aspects will they focus to give their answers?

The notion of trust is filled with paradox. It can go beyond control and calculative self-interest but has its limits, depending on external pressures. Trust and control are both substitutes and complements. Trust entails lack of information but is also based on information. It can be rational, by inference of trustworthiness, but such inference is both limited and enabled by social-psychological heuristics that incorporate emotions.

Trust needs to be pieced together in its multiple dimensions to fit specific conditions. This was illustrated with the case of citizen's trust in the police. There, competence trust suffers from the fact that police service is to a large extent a credence good. Judgement of quality may then be sought in public reports on performance, preferably by some independent agency. It may also be sought in observed proxies of competence such as confident conduct and respectable manner and appearance of police officers. Trust in individual police officers should be supported by trust in police organization and related institutions, e.g. in their supply of sufficient means and training. Concerning intentional trust, hierarchical control is limited by weak direct monitoring of conduct. Citizens are subjected to one-sided dependence, so that there is limited incentive control by mutual dependence. Both problems can be redressed, to some extent, by complaint procedures. However, since control remains weak, trust should further be supported by norms of conduct (integrity), enhanced by selection, training and police culture, and empathy of officers with respect to citizens. Especially salient, perhaps, is that in interaction with the police citizens often find themselves in a loss frame, which increases the emotional loading of contacts, and cognitive leaps to preserve self-interest. This reduces the reliability of compliant procedures and underlines the importance of confident, correct manner, and empathy.

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ⁱ This book incorporates an earlier analysis from Nooteboom (1996).

ⁱⁱ Strictly speaking, this does not satisfy the condition of asymmetric value of a hostage: the poached worker is also of use to the poacher.

ⁱⁱⁱ I do not wish to imply that stability of relations is always a good thing economically, in the sense that it is always conducive to efficiency and welfare. A certain amount of stability may be needed to recoup specific investments, which may in turn be needed to achieve high added value and innovativeness. However, relations can become too stable and exclusive and thereby yield rigidities. The question therefore is how to develop relations that have optimal duration: neither too short nor too long.

^{iv} This paragraph is based on a project commissioned by the Dutch Police